Lat 39.49235 Lon -121.22108

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UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE

COPY

REPLY TO: 3430 FI&DM Evaluation

July 13, 1979

SUBJECT: Challenge Progeny Test Plantation

TO: Director, TM

We have received information from Gaylord Parks on the eight ponderosa pine progeny tests established in 1978 in the Central Zone. This information provides us with the opportunity of viewing the plantations when in the vicinity in conjunction with other work. One such opportunity arose this past week when John Dale, an entomologist on my staff, was on the La Porte Ranger District to view current bark beetle conditions within the proposed Sugarloaf Insect Salvage, Plumas N.F.

The ponderosa pine in the Challenge progeny test plantation were found to be free of any serious insect problem at the present time. A large number of seedlings of each seed source were observed and only one seedling was damaged. The causal insect was the ponderosa pine tip moth, Rhyacionia zozana. This is a native pest of open-grown seedlings and saplings less than 2 m tall. Generally it is not seriously destructive, but repeated heavy attacks retard growth and predispose trees to attacks by other insects. There is some curling of needles on some seedlings, but this is due to retarded opening of needle bundles, not insects. However, there is a potential problem that should be brought to the attention of the plantation manager.

A district plantation of ponderosa pine is located across the road to the west of the progeny test. Trees within this plantation are of sufficient size and density that thinning may be required within the time the progeny test is to be in place as prescribed by the TIP Master Plan (15 yrs). Thus, the following situations can be envisioned:

1) District plantation remains unthinned within the 15 year cycle of the progeny test -- potential of pine engraver (Ips sp.) infestation in progeny test is minimal.

2) District plantation thinned now or within the next 5 years -- potential of pine engraver moving from adjacent thinning slash to progeny test is minimal as progeny test trees will be too small for infestation.

3) District plantation thinned after progeny seedlings have grown to 1+" stem diameter -- potential for movement of pine engravers from slash to progeny test area greatly increased if slash not properly handled, i.e., thinning not properly timed and residues not subject to proper treatment (lopped and scattered in sun, burned, or chipped).

Therefore, there is a need for cooperation between management of the test plantation, district personnel, and FIDM.

This anticipation of a potential problem illustrates the prevention philosophy to which we in FIDM subscribe. Information from other zone geneticists similar to that sent to us by Gaylord will enable FIDM entomologists and pathologists to observe other test plantations when in the field on other assignments.

RICHARD S. SMITH, JR.

WILFRED L. FREEMAN JR., Director
Forest Insect and Disease Management

cc: W. Charter, TM
Gaylord Parks
Jay Ritzmiller

JWDale: av